Section-by-Section Explanation of H.R. 1856,
Harmful Algal Bloom and Hypoxia Research Amendments Act of 2003,
as reported by the Subcommittee on Environment, Technology, and Standards on June 5, 2003

Summary: This Act would amend the Harmful Algal Bloom and Hypoxia Research and Control Act of 1998 (HABHRCA) (16 U.S.C. 1451 note). HABHRCA provided for a Task Force to develop two reports assessing harmful algal blooms and hypoxia at the national scale and two reports addressing hypoxia in the Gulf of Mexico. Additionally, HABHRCA authorized funding through the National Oceanic and Atmospheric Association (NOAA) for research on harmful algal blooms and hypoxia. The bill would retain the Task Force, reauthorize existing research programs, require an assessment of freshwater harmful algal blooms (HABs), and require NOAA to conduct regional assessments of HABs and hypoxia.

Sec. 1. Short Title.
"Harmful Algal Bloom and Hypoxia Research Amendments Act of 2003".

Sec. 2. Retention of Task Force.
Amends HABHRCA by striking subsection 605(e), which provided for the disestablishment of the Task Force after the plans were submitted. Retaining the Task Force will facilitate following through on recommendations from the reports produced by it and is necessary for other activities in the legislation.

Sec. 3. Scientific Assessments and Research Plans.
Amends Sec. 603 of HABHRCA as described below:

Sec. 3 (1) Task Force Activities.
Amends Sec.603(a) of HABHRCA to require the Task Force to work with local resources managers and consult with academic researchers, industry and non-governmental organizations in developing assessments and research plans.

Sec.3(2). Amends Sec. 603(b) and (c) of HABHRCA by striking those sections and inserting the sections described below:

Sec.3(2)(b) Scientific Assessments of Harmful Algal Blooms.
Requires a nationwide assessment of HABs once every five years. This first assessment would include only marine HABs and all subsequent assessments would include marine and freshwater (including the Great Lakes and upper reaches of estuaries) HABs. The timing of the first assessment coincides with a revision, already underway, of national research priorities for marine biotoxin and harmful algal bloom research.

Sec. 3(2)(c). Scientific Assessment of Freshwater Harmful Algal Blooms.
Requires a one-time assessment of freshwater HABs that in the future would be incorporated into the HAB assessment in sec. 3(2)(b). Requires the development

of a research plan for incorporating freshwater HAB research into the Ecology and Oceanography of Harmful Algal Blooms (ECOHAB) interagency grant program. Research on freshwater HABs lags behind efforts addressing marine blooms and there is no comprehensive source of information on the occurrence and effects of freshwater HABs in the United States. Additionally, the Great Lakes have recently exhibited an increase in the occurrence of HABs and more research is needed to understand this phenomenon.

Sec. 3(d). National Scientific Research Plan into Reducing Impacts from Harmful Algal Blooms.

Requires a research plan and establishment of a research program based on the plan to develop methods in the prevention, control and mitigation of HABs. In the past, funding for research on such methods never was appropriated because there was no consensus plan for using such funding. There are two potential plans in previously issued NOAA reports that the Task Force could use to develop a research plan. Such a plan would help bridge the gap between basic research and management activities, which scientists believe is an important next step in HAB research.

Sec. 3(e). Scientific Assessments of Hypoxia.

Requires national hypoxia scientific assessments once every five years. Since hypoxia is one symptom of coastal eutrophication (nutrient pollution), the assessments would support part of a multi-agency effort, led by NOAA, already underway to assess the scope and science of coastal eutrophication on a regular basis.

Sec. 3(f). Local and Regional Scientific Assessments.

Authorizes funding for local and regional scientific assessments of HABs and hypoxia, as requested by localities and coordinated through the Task Force and the National Ocean Service (NOS) at NOAA. Local and regional assessments would be more useful to the state and local resource managers because the causes of and potential mitigation methods for HAB or hypoxic events vary with regional water use, land use, and ecology. NOAA and the Task Force are in a good position to help coordinate such assessments since they are a central source of expertise about HABs and hypoxia.

Sec. 4 Prediction and Response Plan

Requires the development of a plan to protect the environment and public health from impacts of harmful algal blooms. The plan will review HAB prediction techniques, identify innovative HAB response measures, and recommend steps needed for implementation of both of these topics.

Sec. 5. Authorization of Appropriations.

Amends Sec. 605 of HABHRCA by striking the original language and inserting authorizations for 2004, 2005, and 2006. Total authorizations for 2004 would be $29.2 million; for 2005, $30.7 million; and for 2006, $31.2 million. All authorizations for

research programs (2, 3, 4, and 5) are placed under the Coastal Ocean Science Program so that the funds are used for competitive, peer-reviewed and merit-based research.

This total is divided among the following programs:

1. $3 million annually for research and assessment activities at National Ocean Service Laboratories.
2. $10.2 million for the ECOHAB program, of which $2 million should be used for research on freshwater HABs.
3. $2 million in 2004, $3 million in 2005 and 2006 for research on prevention, control and mitigation methods
4. $6 million annually for the Monitoring and Event Response for Harmful Algal Blooms (MERHAB) program.
5. $5 million in 2004, $5.5 million in 2005, and $6 million in 2006 for research and monitoring on hypoxia by the National Ocean Service and the Office of Oceanic and Atmospheric Research of NOAA.
6. $3 million annually for the local and regional assessments in Sec. 3(f).

Sec. 6. Coastal Ocean Science Program.

Amends the Coastal Ocean Program in the National Oceanic and Atmospheric Administration Authorization Act of 1992 so that the program supports Great Lakes, estuarine and coastal ocean research and assessment through competitive, peer-reviewed, and merit-based research programs. Sets authorization levels for the Coastal Ocean Science Program at $34,000,000 for fiscal year 2004, $36,000,000 for fiscal year 2005, and $38,000,000 for fiscal year 2006.